WE CLAIM:

- 1. A propellant mixture formed by combining a pair of high energy propellants, said pair having a first fast burn rate high energy propellant and a second slow burn rate high energy propellant, the ratio of the fast burn rate to the rate of the slow burn rate being at least three as measured at 25 kpsi, the pair of propellants being equi-energetic and having an average impetus of at least 1300 Joules/g, the first propellant having 20% by wt. of an oxetane, thermoplastic elastomer energetic binder, 76% by wt. C1-20 and 4% by wt. of TNAZ, the second propellant including an oxetane thermoplastic elastomer energetic binder and RDX, whereby the second slow burn rate propellant enters? the ballistic cycle later than the first fast burn rate propellant
- 2. The propellant mixture of claim 1 where the fast burn rate is 21.0 inches /sec as measured at 25 kpsi.
- 3. The propellant mixture of claim 1 where the slow burn rate is 4.4 inches/ sec as measured at 25 kpsi.
- 4. The propellant mixture of claim 1 where the slow burn rate is 4.5 in. /sec as measured at 25 kpsi.
- 5.. The propellant mixture of claim 1 where the ratio of the fast burn rate to the slow burn rate is up to 4.8/1 as measured at 25 kpsi.

